

Amendments to the Claims

This listing of claims will replace prior versions and listings of claims in the application:

Listing of claims

1. (currently amended) A system for monitoring activity and comfort of at least one subject, comprising:

at least one data acquisition unit comprising a modular and variable set of sensors comprising a number of sensors, which nature and connection are combined according to needs of the at least one subject under monitoring, a signal-processor receiving data from said set of sensors, and an activity modulator connected to said signal-processor; and

at least one control unit connected to said at least one data acquisition unit, said at least one control unit comprising a communication device and a user interface;

wherein said user interface allows a person in charge of the at least one subject to be informed of a state thereof, and said activity modulator allows the person in charge to order a retroaction according to at least a state of the at least one subject, and to request complementary data

~~wherein said at least one data acquisition unit further comprises devices selected in the group consisting of a microphone, a loudspeaker, a radio receiver, a radio transmitter, a camera and a video transmitter; and~~

~~wherein said at least one control unit comprises modules selected in the group consisting of sound modules and audio/video modules.~~

2. (currently amended) The system according to claim 1, wherein said set of sensors comprises main sensors selected ~~in~~ from the group consisting of movement sensors and cerebral activity sensors, and complementary sensors selected ~~in~~ from the group consisting of G sensor, GPS, tilt sensor, infrared sensor, echo sensors, magnetic sensoelectrodes, temperature probe, moisture meter, sound environment sensor and body imaging device.

3. (canceled)
4. (canceled)
5. (currently amended) The system according to claim 1 [[4]], wherein said communication device comprises a signal processor including a memory and processing means.
6. (currently amended) The system according to claim 1 [[4]], wherein said communication device is connected to a communication network.
7. (currently amended) The system according to claim 1 [[4]], wherein said communication device allows adjusting a transmission power between the at least one data acquisition unit and the at least one control unit.
8. (currently amended) The system according to claim 1, further comprising a transport unit, which allows said at least one data acquisition unit to keep track of the activity of the at least one subject, and an environment unit which allows keeping track of environmental parameters, wherein the person in charge orders a needed retroaction according to the state of the at least one subject and to parameters of the environment of the at least one subject.
9. (currently amended) A system for monitoring activity and comfort of at least one subject, comprising:

at least one data acquisition unit comprising a modular and variable set of sensors comprising a number of sensors, which nature and connection are combined according to needs of the at least one subject under monitoring; a signal-processor receiving data from said set of sensors, and an activity modulator connected to said signal-processor; and

at least one control unit connected to said at least one data acquisition unit, said at least one control unit comprising a communication device and a user interface;

wherein said set of sensors comprises a wing-shaped piezoelectric sensor and sensors selected ~~in~~ from the group consisting of G sensor, GPS, tilt sensor, infrared sensor, echo sensors, magnetic sensoelectrodes, temperature probe, moisture meter, sound environment sensor and body imaging device; and

wherein said user interface allows a person in charge of the at least one subject to be informed of a state thereof, and said activity modulator allows the person in charge to order a retroaction according to the state of the at least one subject and to request complementary data.

10. (original) The system according to claim 9, wherein said wing-shaped piezoelectric sensor comprises at least one piezo film coated with a flexible, non-allergenic and isolating material.
11. (currently amended) The system according to claim 9, wherein said wing-shaped piezoelectric sensor detects movements selected ~~in~~ from the group consisting of the at least one subject's rib cage movements, the at least one subject's diaphragm movements, the at least one subject's respiratory movements and the at least one subject's heartbeat.
12. (original) The system according to claim 9, wherein said wing-shaped piezoelectric sensor comprises wings which position is able to be calibrated.
13. (canceled)
14. (currently amended) The system according to any one of claims 2 ~~and~~ or 9, comprising a temperature probe, the temperature probe allowing ~~allows~~ measuring a cutaneous temperature of the subject and comparing it ~~to~~ the cutaneous temperature to a reference temperature set as a comfort temperature zone.
15. (currently amended) The system according to claim 14, wherein the comfort temperature zone is updated in relation to characteristics of the at least one subject selected ~~in~~ from

the group consisting of ~~its~~an age, ~~its~~a size, a proper sensitivity ~~thereof~~, and ~~its~~a state of health, of the at least one subject.

16. (currently amended) The system according to ~~anyone~~ any one of claims 2 ~~and~~ 1 or 9, wherein the set of sensors is maintained in a close relationship with the at least one subject's body.
17. (currently amended) The system according to ~~anyone~~ any one of claims 1 ~~and~~ or 9, wherein said at least one control unit receives signals of the state of the at least one subject at intervals and provides alerts.
18. (currently amended) The system according to claim 17, wherein the ~~alarms~~ alerts are triggered by states selected ~~in~~ from the group consisting of awaking of the at least one subject, absence of movement after a predetermined delay, ~~and~~ position variations as measured by the set of sensors and qualified by the signal processor.
19. (currently amended) The system according to ~~anyone~~ any one of claims 1 ~~and~~ or 9, wherein activity comprises activities selected ~~in~~ from the group consisting of rest, physical activity, absence of a movement, absence of respiration, a sleeping state, an awoken state, an active state, an intense active state, an intermediate active state and cerebral activity, and monitoring comprises an assessment of an intensity and of a nature of the activity from a distance.
20. (currently amended) The system according to any one of claims 1 ~~and~~ or 9, wherein said at least one data acquisition unit is integrated in a portable assembly.
21. (canceled)
22. (canceled)

23. (currently amended) A method for monitoring activity and comfort of at least one subject
~~using the system according to anyone of claims 1, 9 and 21, comprising the steps~~
of:

collecting data relative to the at least one subject;

processing and transmitting the data collected to a person in charge of the at least one
subject; and

activation of a retroaction unit in response to the data for adjustment in real time to
specific characteristics of activity and comfort of the at least one subject.